

ABSTRACT

[Abstract]

[Problem] A silicon single crystal ingot in which point defect agglomerates do not exist over a substantially entire length thereof is manufactured without reducing a pure margin.

[Solving Means] A heat shielding member 36 comprises a bulge portion 41 which is provided to bulge in an in-cylinder direction at a lower portion of a cylindrical portion 37 and has a heat storage member 47 provided therein. A flow quantity of an inert gas flowing down between the bulge portion 41 in the heat shielding member 36 and an ingot 25 when pulling up a top-side ingot 25a of the silicon single crystal ingot 25 is set larger than a flow quantity of the inert gas flowing down between the bulge portion 41 and the ingot 25 when pulling up a bottom-side ingot 25b of the silicon single crystal ingot 25, thereby pulling up the ingot 25. Alternatively, an intensity of a cusp magnetic field 53 when pulling up the top-side ingot 25a is set higher than an intensity of the cusp magnetic field 53 when pulling up the bottom-side ingot 25b.

[Selected Drawing] FIG. 1